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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,025	01/09/2006	Akio Nishida	36856.1402	3761
54066 7590 02/07/2008 MURATA MANUFACTURING COMPANY, LTD. C/O KEATING & BENNETT, LLP 8180 GREENSBORO DRIVE SUITE 850 MCLEAN, VA 22102			EXAMINER PHAM, EMILY P	
			ART UNIT 2838	PAPER NUMBER
			NOTIFICATION DATE 02/07/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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7/4

Office Action Summary	Application No.	Applicant(s)	
	10/564,025	NISHIDA ET AL.	
	Examiner	Art Unit	
	EMILY PHAM	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/09/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/09/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/09/2006 & 11/02/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 01/09/06 and 11/02/2006 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al. (USP 6,577,511).

Regarding independent claim 9: Yamaguchi et al. (**FIG 1**) disclose a switching power supply device comprising:

a transformer (**T**) including a primary winding (**N1**), a secondary winding (**N2**), and a feedback winding (**N3**);

a first switching element (**Q1**) connected in series to the primary winding;

a control circuit (**4**) provided between a control terminal of the first switching element and the feedback winding;

a rectifier circuit (**2**) connected to the secondary winding (**N2**); and an output voltage control circuit (**3**) arranged to detect an output voltage output from the

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rectifier circuit (2) and feed back the output voltage to the control circuit (4) through a single system; wherein the control circuit (4) includes an on-period control circuit (5) arranged to turn off the first switching element in an on-state based on a feedback signal transmitted from the output voltage control circuit through the single system under non-light load, and an off-period control circuit (6) arranged to control an off-period of the first switching element by delaying turn-on of the first switching element based on the feedback signal under light load (col.1, line 59 - col. 3, line 22).

Regarding dependent claim 10: Yamaguchi et al. (FIG's 5-7, 9-12A) disclose the switching power supply device further comprising an impedance circuit (PT1) arranged to connect the off-period control circuit to the on-period control circuit, the impedance thereof changing based on the feedback signal, wherein control of the off-period control circuit under light load and control of the on- period control circuit under non-light load are sequentially performed in accordance with a change in the impedance of the impedance circuit (col.1, line 59 - col. 3, line 22; col. 5, line 53 - col. 15, line 12).

Regarding dependent claim 11: Yamaguchi et al. (FIG's 5-7, 9-12A) disclose the switching power supply device, wherein the on-period control circuit (5) includes a second switching element (Q2) provided between the control terminal of the first switching element (Q1) and the ground and a time constant circuit including a capacitor (C3) arranged to apply a control voltage to the second switching element, the off-period control circuit (6) includes a third switching element (Q3) provided between the control terminal of the first

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switching element **(Q1)** and the feedback winding **(N3)** and a fourth switching element **(Q4)** provided between a control terminal of the third switching element **(Q3)** and a ground, and the impedance circuit includes a first path **(path between Vcc and PT1)** for feeding a current generated by the feedback signal to the capacitor and a second path **(path between N3 and PT1)** serving as a bypass for feeding the current to the ground **(col.1, line 59 - col. 3, line 22; col. 5, line 53 - col. 15, line 12).**

Regarding dependent claim 12: Yamaguchi et al. disclose the switching power supply device, wherein a minimum on-period is set in the on-period controlled by the on-period control circuit **(col.1, line 59 - col. 3, line 22; col. 5, line 53 - col. 15, line 12).**

Regarding dependent claim 13: Yamaguchi et al. disclose the switching power supply device, wherein the impedance circuit **(PT1)** is provided with a clamp circuit **(R7)** arranged to control a voltage of the capacitor **(C3)** in the on-period control circuit **(5)** for determining the control voltage of the second switching element **(Q2)** at a predetermined value when the first switching element is in an off-state **(col.1, line 59 - col. 3, line 22).**

Regarding dependent claim 14: Yamaguchi et al. disclose the switching power supply device, wherein the second path **(path between N3 and PT1)** is a bypass circuit arranged to feed the current generated by the feedback signal only when the first switching element is in an off-state **(col.1, line 59 - col. 3, line 22; col. 5, line 53 - col. 15, line 12).**

Regarding dependent claim 15: Yamaguchi et al. **(FIG 10, FIG 12A)** disclose the switching power supply device, wherein the off-period control circuit **(6)** includes a limit circuit **(Q8, R18, R19, R20)** arranged to set an upper limit of a voltage applied to the control terminal of the first switching element **(col.1, line 59 - col. 3, line 22)**.

Regarding dependent claim 16: Yamaguchi et al. **(FIG's 1, 3, 5-12A)** disclose an electronic apparatus comprising a power supply circuit unit including the switching power supply device according to Claim 9 **(col.1, line 59 - col. 3, line 22)**.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Nishida et al. (USP 6,529,392) disclose switching power supply unit.

Takamatsu (USP 6,816,392) discloses an overcurrent output protector for switching power supply.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMILY PHAM whose telephone number is (571)270-3046. The examiner can normally be reached on Mon-Thu (7:00AM - 6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on (571) 272 - 2361. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Feb. 2008

/E. P./
Examiner, Art Unit 2838

/Jessica Han/
Primary Examiner, Art Unit 2838